Alexa Levesque

EDC 423- Text Analysis

Dr. Coiro

**Part 1**

|  |  |
| --- | --- |
| Resources | Challenges |
| * p. 10, Title: “See how Cheetahs Survive in the Wild”- Is helpful because it is gives a good hint as to the topic of the article. * Pg. 12 end of paragraph 1:   “It is, but not in the ways you may think,” This could be helpful because it sets up the next paragraph to talk about the unexpected cheetah fact   * Pg. 12 paragraph 2: the last sentence is used to explain the importance of poor night vision to a cheetah * Pg. 12 paragraph 4 is helpful because it re-iterates the information given and again hints that there are good qualities as well * Pg. 12- The word “adaptation” is bolded (signifies importance) and then defined, as is “characteristics” * Pg. 12 Photo: This picture and caption go well together, and also connect to the first paragraph on the next page, which talks about the markings, describing them in the same words. * Pg. 13 Paragraph 2: once again, the word “camouflage” is defined, and then the importance is also explained as it relates to the cheetah. * Pg. 14: the word pivot is defined in paragraph 4. * Pg. 14 Paragraph 13: Late in the paragraph, there is an explanation for the “rudder” image stating that the cheetahs’ tail “balances the body to keep it on course. * Pg. 15: Picture- While I feel that the other visual should have also appeared on this page, the photo of the cheetah running with its tail helping to balance is helpful for students who may not be able to visualize this on their own. Also, the caption for the picture matches the articles words so it is easy to see exactly which part of the text it relates to. * Pg. 16, Paragraph 4 ends with the sentence “It dies”. This explicitly tells the students what happens without any ambiguity. * Pg. 16, Last 2 Paragraphs: These paragraphs sum up the entirety of the article. Although they may seem redundant to a student who had good comprehension of the text, this would be very helpful for a student who struggled to understand it all. * Pg. 17 Visuals: The two pictures are valuable to the comprehension of the article though I think they would have served a bigger purpose if they were in different spots. As mentioned in the challenges section, the words predator and prey were not defined in the article, and therefore this type of vocabulary box would have been more valuable had it been at the beginning of the text. | * p.12 paragraph 1, students might not know what “grasslands” are. * Pg. 12- the word “prey” is bolded, but not defined on this page * Pg. 12- uses “predator” and “hunter” interchangeably, this could be confusing to students who do not connect that they are talking about the same thing * Pg. 13: The first sentence says that the cheetah climbs, but it could be confusing because the article said before that Cheetahs were not good climbers * Pg. 13: The structure that begins on this page could be confusing; the article goes from facts straight into a sort of narrative without explanation. Goes from “a cheetah” to “the cheetah” * Pg. 13, Paragraph 1: students may not know the word “glare”, the expression “sharp eyes”, or what “gazelles” are. * Pg. 14 Paragraph 2: students may not be able to understand how fast 50 mph is, especially if they live in a city and are not on highways often * Pg. 14: “Fast on Its Feet” section would be better understood if the visual was on this page to accompany the explanation of how a cheetah runs. * Pg 14: “This cat looks like its flying” students may get confused with the interchangeable use of “cat” and “cheetah” * Pg.14 Paragraph 8:Students may not know what the word blunt means, and would have to make an indirect reference that it is the opposite of sharp as stated later in the paragraph * Pg. 14 Paragraph 8: Also, the reader must make a connection between the “moves” that the cheetah copies and those of the gazelle described in the previous paragraph * Pg. 14 Paragraph 11-12: Students must connect that “Not the Cheetah (an incomplete sentence) is connected to the sentence about other cats fluffy tails. This entire paragraph is tricky because it then goes on to give the image of a boat rudder, something that students are likely unfamiliar with, to describe the cheetah’s movements. This should have been combined with the next paragraph, which describes the motion a bit more clearly. This is a theme throughout the article; the paragraphs are very short and often cut off flowing ideas without good connectors. This section would have also been clearer if the labeled picture accompanied the visual on pg. 15 on pgs. 16-17. * The next two sections on pg. 16 are confusing because it breaks into a narrative style that reiterates things that the article already discussed. If this was done with an explanation about the change in the structure it could have been helpful, but as it is, it is just confusing to the reader who may think that they are re-reading something similar to the beginning of the article. This narrative style could have worked better if it was directly incorporated with the discussion of the adaptations. * Pg. 16, Paragraph 4 refers back to the “zig-zag” of the gazelle and expects that students can connect this back to the section about the adaptations in the cheetah’s foot. * Pg. 16 Interchanges the words “prey”, “gazelle”, and “the kill” for each other, possibly confusing for the reader * The last picture that labels the Cheetah’s adaptations would have also been more useful had it been placed on the previous page along with the descriptions of these adaptations, though it is a great visual to show students how holistic adaptations are. |

**Part 2**

1. Main Ideas:

* Cheetahs’ adaptations make them good hunters in their natural habitat.
  + They are extremely fast
  + During the day, they can see across the plains
  + Their spotted fur helps them to blend into their environment
  + Their spine is very flexible allowing them to take long strides
  + The cheetah’s tail acts as a rudder, keeping them balanced and on course as they zigzag around obstacles
  + Cheetahs have dark markings under their eyes to cut down on the sun’s glare.
* Cheetahs have certain traits that do not make them good hunters:
  + They cannot see well at night
  + They cannot roar loudly
  + They are unable to climb well
  + They do not have sharp claws to catch prey
  + They can only run for short times

1. Big Ideas

* Adaptations have helped animals to evolve as needed in their environments.
* Without adaptations, animals would not survive.
* If take out of these habitats, animals would not be as successful.

1. Learning Goals:

* Students will demonstrate knowledge about the specific adaptations of cheetahs that make them good hunters.
  + They are extremely fast
  + During the day, they can see across the plains
  + Their spotted fur helps them to blend into their environment
  + Their spine is very flexible allowing them to take long strides
  + The cheetah’s tail acts as a rudder, keeping them balanced and on course as they zigzag around obstacles
  + Cheetahs have dark markings under their eyes to cut down on the sun’s glare.
* Students will be able to identify what shortcoming cheetahs have and how their adaptations help them to overcome them.
  + They cannot see well at night
  + They cannot roar loudly
  + They are unable to climb well
  + They do not have sharp claws to catch prey
  + They can only run for short times
* Students can apply what they have learned about adaptations to understanding of other animal’s features.

**Part 3**

Launch:

“I want you guys to “think-pair-share” about what animals need to survive. Think about the idea that animals need to have certain characteristics to survive in harsh environments, or to escape their predators. After you share, I want one of the partners to come up to the board and write down some of your group’s best ideas.” The student will be given 1 minute to think and then 2 minutes to talk with their partner. When the time is up, they will come up to the board and write down their ideas. Some of the ideas will be about being safe from other animals, staying warm or cool, and being able to catch food with many others as well. “We have some really great ideas up here! In order for animals to do all of these things that they need to survive they need certain characteristics. Over time, animals have adapted, or changed to better fit their environments and their needs. For example a polar bear, (show pictures on the projector) has layers of fat that keep them warm in the winter, white fur so that they can camouflage or blend into their snowy environment, and special paws so that they can swim quickly. We’re going to read an article about another animal with very specific adaptations called, “See How Cheetahs Survive in the Wild”. While we read this, I want you to be thinking about how the adaptations help Cheetahs to survive, which characteristics of cheetahs would not make them good hunters, and what other types of adaptations animals need to survive. Before we begin, I want you to fill out this anticipation chart to see what we know, or think we know about cheetahs. As you read, check back to see if you were correct.

Anticipation Chart Example:

1. Cheetahs can run really fast, for a long time. T/F

2. Cheetahs have spotted fur, which acts as camouflage. T/F

3. Cheetahs have a loud roar to scare prey. T/F

4. Cheetahs have sharp claws. T/F

5. Cheetahs have very poor night vision T/F

6. Cheetahs have big fluffy tails, like most cats. T/F

7. Cheetahs can climb tall trees. T/F

8. A Cheetah’s tail acts like a boats rudder, helping them to zigzag while they run. T/F

9. Dark markings under a cheetah’s eyes help to keep the sun’s glare out of their eyes. T/F

10. Cheetahs have a flexible spine, which helps them to take long strides. T/F

11. Cheetahs are the fastest land animals. T/F

12. Dark marks under their eyes attract the sun, making it hard for cheetahs to see. T/F

**Part 4**

Exit Activity:

1. Students will go back to their anticipation charts to note what they were right about and things that they had not learned yet. They will then write a short summary of the new things that they learned about cheetahs’ adaptations and why their original answers were not correct citing knowledge from the text an d including both positive adaptations of cheetah’s and any shortcomings that were not anticipated.
2. Students will create their own animal that has adaptations to fit a randomly chosen environment, food source, predators and prey. The students will pretend that they are zoologists who have discovered a new animal with great adaptations for their specific environment and needs and must then describe their animal’s different adaptations and why they are useful.

**Part 5**

|  |  |
| --- | --- |
| Page/ending phrase | Question |
| P. 12… “helps an animal survive”  Pg. 13 “ …sharp eyes spot a herd of gazelles”  Pg. 13 “gazelles to see the cheetah”  Pg.14 “across the grasslands”  Pg.14 “…the cat can change direction with ease”  Pg. 15 (picture)  Pg. 16 “ …In a flash, the cheetah leaps forward.”  Pg. 16 “…it dies.”  Pg. 16 “…try to steal this meal from the cheetah”  Pg.16 “…the cheetah an awesome predator” | Q: So why is it so important that cheetahs have adaptations?  A: To hunt  Q: Right, so which characteristics about cheetahs are not so good for hunting?  A: They can’t climb, or grab prey with their claws, and they can’t see at night.  Q: Any other characteristics that are not good for hunting?  A: They can’t see well at night either, and they can’t roar or fun for very long.  Q: Right, so again, why is it so important that they have other adaptations?  A: So that they can make up for the things they are not good at.  Q: So now what are some good characteristics that we have learned about the cheetah?  A: They have black marks on their faces like in the picture so that they can see.  Q: And how do they help them to see well?  A: They stop the glare from the sun since it is so bright.  Q: Good, and can we all look back and find a reason why it is so important that cheetahs can see during the day?  A: Well it says that their eyes are sharp during the day, but they can’t see well at night  Q: Exactly, so can someone connect that to their role as a hunter?  A: Cheetahs have to hunt during the day since they have bad night vision so these marks are important to their hunting skills.  Q: What is so special about a cheetah’s fur?  A: Because it’s spotted so they match the grass and can blend in.  Q: Exactly, so what is one important reason for this camouflage stated in the text, and another possible reason that you can think of?  A: In the text it says that it is so that the gazelles can’t see them before they attack, but maybe it is so that possible predators can’t see them either.  Q: What is a reason that a cheetah’s ability to run really fast for only a short time would affect their hunting?  A: They cannot go out and run a lot of times  Q: Right, so what could this mean as far as hunting for their food?  A: Cheetahs must have to make sure that they can get their food fast  Q: They do! Can anyone make a prediction, based on what we have already read about how they might be able to make sure they get their food fast?  A: I think that we’re going to learn about adaptations that help them even though they can’t run for that long.  Q: Before we go any further, I just want to check with you. What is the cat that they’re talking about?  A: The cheetah, it’s a kind of cat.  Q: Right, so how though, does the texts say that they are different from other cats?  A: Their tail is long and thin instead of fluffy.  Q: Good, so how does this affect their hunting?  A: They can run and turn faster because it helps them to keep their balance because it moves with them like in the picture.  Q: Okay, great! So why do you think that the author is choosing to compare the cheetah to other cats?  A: Maybe they to show us how the cheetah is better made for hunting than other kinds of cats.  Q: Can anyone explain what is happening in this picture of the Cheetah?  A: It looks like it’s running fast.  Q: It sure does, does this picture help to tell us anything else about how the cheetah is running?  A: I think that the Cheetah was turning.  Q: And what would make you say that?  A: In the article, it said that when a cheetah turns, its tail goes in the same direction to help it to balance.  Q: Is there anything about the environment that the cheetah is running in that might be important as well?  A: It looks like there’s a lot of sand.  Q: Right, the dirt is almost the color of the sand that we would see here at the beach. What have we learned about the cheetah’s adaptations that might have to do with what the dirt looks like?  A: The dirt is almost the same color as the cheetah’s fur.  Q: And why would that matter?  A: Well since it’s the same color, the cheetah can blend into it and hide from other animals.  Q: And why is that important?  A: Before it said that they hide from the gazelles so that they can surprise attack them.  Q: Why did the cheetah leap forward?  A: To attack the gazelle.  Q: Right, but why did it choose that exact moment.  A: Because the gazelle had just noticed that something was watching it.  Q: And how do you know that?  A: Because it says that the gazelle “sensed” something and that is like noticing.  Q: So why didn’t the cheetah wait a little longer to go after the gazelle?  A: Because it has to act fast since it can’t run for very long.  Q: In this description of the chase what are some important adaptations that the cheetah uses? Look at the diagram to help.  A: It must use all of them, but especially its flexible spine and its tail.  Q: And what makes you pick those two.  A: Well it says that that cheetah is running really fast, and its spine helps it to do that by springing forward. Also, the tail must help him turn because it says that the gazelle zigzagged and the cheetah followed.  Q: Why is the cheetah so exhausted after the short chase?  A: Because it ran fast.  Q: Right, and what did we learn before that makes this make sense?  A: Before it said that they can only run fast for a little while  Q: Yes we did. So why would it be “easy” for other animals to steal the cheetah’s food?  A: The cheetah isn’t that big, it is made to go fast, but probably not to fight bigger animals.  Q: What do you think might happen if a cheetah were living in another part of the world?  A: The cheetah would not be such a good hunter.  Q: And why do you think that?  A: Because animals adapt to the place where they live so if it were somewhere else, like a place where it didn’t blend into the grass, it probably couldn’t survive. |